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# Notice of Allowability

## Application No.

09/916,243

## Examiner

Jean M Corrielus

## Applicant(s)

WACHTEL, DAVID C.

## Art Unit

2172

### -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to THE amendment filed on 08-25-04.
2. ☒ The allowed claim(s) is/are 1-8, 11-19, 21-30; 33-41; 43-52; 55-63 and 65-96.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892) ✓
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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JEAN M. CORRIELUS  
PRIMARY EXAMINER

### DETAILED ACTION

1. This office action is response the amendment filed on August 24, 2004, in which claims 1-8, 11-19, 21-30; 33-41; 43-52; 55-63 and 65-96 are presented for further examination.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Josephine E. Chang Reg. No. 46,083 on August 24, 2004.

The application has been amended as follows:

1. (Currently Amended) A method of fulfilling a data service request, the method comprising:

providing an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service;

providing a first workflow;

providing a plurality of logical search objects operably coupled via a respective one of a plurality of communications links to a respective one of a plurality of data providers and operably coupled to the first workflow;

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transmitting by the logical search objects to the data providers via the communications links a plurality of search requests, the search requests generated by the first workflow from the data service request;

receiving by the logical search objects from the data providers via the communications link a plurality of data sets in response to the search requests;

transmitting by the logical search objects to the first workflow the data sets; and  
generating by the first workflow a knowledge instance from the data sets using the ontology description of the data service.

23. (Currently Amended) A data processing object system adapted to fulfill a data service request, comprising:

a processor; and

a memory operably coupled to the processor and having program instructions stored therein, the processor being operable to execute the program instructions, the program instructions including:

providing an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service;

providing a first workflow;

providing a plurality of logical search objects operably coupled via a respective one of a plurality of communications links to a respective one of a plurality of data providers and operably coupled to the first workflow;

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transmitting by the logical data providers via the communications links a plurality of search requests, the search requests generated by the first workflow from the data service search objects to the description request;

receiving by the logical search objects from the data providers via the communications link a plurality of data sets in response to the search requests;

transmitting by the logical search objects to the first workflow the data sets; and

generating by the first workflow a knowledge instance from the data sets using the ontology description of the data service.

45. (Currently Amended) A computer readable media embodying program instructions for execution by a computer, the computer program instructions adapting a computer to fulfill a data service request, the program instructions comprising:

providing an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service;

providing a first workflow;

providing a plurality of logical search object a operably coupled via a respective one of a plurality of communications links to a respective one of a plurality of data providers and operably coupled to the first workflow;

transmitting by the logical search objects to the data providers via the communications links a plurality of search requests the search requests generated by the first workflow from the data service request;

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receiving by the logical search objects from the data providers via the communications link a plurality of data sets in response to the search requests;  
transmitting by the logical search objects to the first workflow the data sets; and  
generating by first workflow a knowledge instance from the data sets using the ontology description of the service

67. (Currently Amended) A method of building a knowledge instance for a data service, comprising:

providing a plurality of logical search objects, each logical search object operable to retrieve a data set from one or more data providers;

instantiating by a first workflow one or more logical search objects selected from the plurality of logical search objects;

receiving by the one or more logical search objects data sets from the one or more data providers;

transmitting by the one or more logical search objects to the workflow the data sets; and

generating by the workflow the knowledge instance from the data sets using an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service.

82. (Currently Amended) A data processing system adapted to build a knowledge instance for a data service, comprising:

a processor; and

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a memory operably coupled to the processor and having program instructions stored therein, the processor being operable to execute the program instructions, the program instructions including:

providing a plurality of logical search objects, each logical search object operable to retrieve a data set from one or more data providers;

instantiating by a first workflow one or more logical search objects selected from the plurality of logical search objects;

receiving by the one or more logical search objects data sets from the one or more data providers;

transmitting by the one or more logical search objects to the workflow the data sets; and

generating by the workflow the knowledge instance from the data sets using an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service.

***Allowable Subject Matter***

3. Claims 1-8, 11-19, 21-30; 33-41; 43-52; 55-63 and 65-96 are allowable in light of the applicants' arguments and in light of the prior art made of record.

***Reasons For Indicating Allowable Subject Matter***

4. The following is an examiner's statement of reasons for allowance: Upon searching a variety of databases, the examiner respectfully submits that -- providing an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service-- in claims 1, 23 and 45; -- generating by the workflow the knowledge instance from the data seta using an ontology description of a data service, wherein the ontology description of the data service comprises a semantic description of atomic objects associated with the data service-- in claims 67 and 82, in conjunction with all other limitations of the dependent and independent claims are not taught nor suggested by the prior art of record (PTO-892). Therefore, all pending claims 1-8, 11-19, 21-30; 33-41; 43-52; 55-63 and 65-96 are hereby allowed.

5. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".



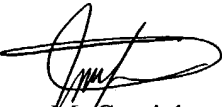
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*Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (703) 306-3035. The examiner can normally be reached on Monday - Friday (12:00pm - 7:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean M. Corrielus  
Patent Examiner

August 25, 2004